TED STEVENS
ALASKA

United States Senate

OFFICE OF
THE ASSISTANT MAJORITY LEADER
WASHINGTON, D.C. 20510

September 24, 1981

The Honorable Caspar Weinberger
Secretary of Defense
Washington, D.C. 20301

Dear Secretary Weinberger:

Enclosed is a letter from [redacted] STAT
[redacted] STAT
Alaska. I have known [redacted] for many years. He is a STAT
man in possession of great insight, especially in the area of communication.

[redacted] has expressed an interest in employing Alaska's STAT
unique geography for purposes of electronic intelligence and national interest transmissions. This correspondence expresses his interest in pursuing the merits for both of these projects.

I would greatly appreciate your analysis of these ideas. I, and others in Congress, are interested in the potential of Alaska to contribute further for the national interests. We hope to be able to work with you to implement some of Augie's observations in the near future.

I greatly appreciate your attention to this important matter.

With best wishes,

Cordially,

TED STEVENS
Assistant Majority Leader

Enclosure

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Anchorage, Alaska
September 9, 1981

Senator Ted Stevens
U.S. Senate
Washington, D.C. 20510

Re: (1) Potential of Alaska as a base for short-wave transmissions to Iron Curtain countries.

(2) Alaska as an intelligence listening post.

Dear Senator Ted:

When I visited with you at breakfast last May I touched o the above subjects briefly and you asked that I present m thoughts in writing.

During my first four years of radio engineering in Fairbc (1939-1943) it was necessary to acquire news [redacted] by copying Transradio Press. It came in via short-wave at 4 55 words per minute on various short-wave frequencies and throughout the day from several sources. The majority of these transmissions were from New York, a few from San Fr cisco and very few from Hawaii. The phenomena of short-w fadeout conditions, wherein signals would simply disappe sometimes almost instantaneously, sometimes after a fadin process, was little known in those days. Now we know fad outs are caused by violent solar eruptions, causing magne disturbances which are accentuated in Polar regions.

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What I noticed while copying press was that short-wave si nals (and standard broadcast band reception for that matt would fade out first and most dramatically when the sourc was from an East-West path, and would be usable the longe (and may not disappear completely) when transmissions were from South to North location. Conversely North to South transmissions were always more reliable and effective than West to East during my Amateur Radio days in Fairbanks, ar this phenomena was also noted during World War II when my short-wave transmitter, licensed experimentally [redacted]

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[redacted]

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transmitted secret weather information, decoded from Soviet transmissions, to the South 48 for use by the Pentagon for planning strategic bombing of the Kuriles. This was part of

[redacted] STAT

From those early days experiences and studying the peculiarities of both short-wave and standard broadcast band propagation, I reached the conclusion that while Arctic Alaska, situated in the Polar Magnetic cap, suffered periods of severe fadeouts and complete loss of signals occasionally, this phenomena might well be turned to a useful advantage.

In the late 1950's and early 1960's, [redacted] STAT of Radio Free Europe and coordinated with Federal Agencies in raising funds. In 1959 I joined a group of other State Chairmen and we visited the Munich RFE Headquarters, and their transmitter site near Lisbon. We were told of the severe jamming problem the Soviet Union imposed on Iron Curtain Country citizenry, who depended on RFE and Voice of America for truthful information. It was then that I began to think of Alaska as the potential platform for short-wave transmissions to Iron Curtain target countries.

The problem with transmitting from Lisbon to behind the Iron Curtain is the relatively short distance involved. This requires fairly low frequency transmissions which can be jammed quite effectively over widespread local areas.

Transmitting from Alaska, on higher short-wave frequencies would create more of a jamming problem, because local jamming devices on higher short-wave frequencies cover a fairly short radius, and the economics of building and operating large quantities of local jammers would be staggering. While it is true that there would be periods of time, during fadeout conditions, when no signals would propagate from the Arctic, still when propagation was superb, Alaskan transmissions would penetrate more effectively. Wouldn't it be better to have highly influential programming reach the target Iron Curtain countries most of the time than to be jammed virtually all the time?

The reason I have not brought this matter to your attention is concern over the economics of duplicating in Alaska what I saw at RFE in Munich. Until the advent of high quality program line service via Satellite, it did not seem feasible to have a redundant Headquarters programming operation in Alaska to feed programming to the transmitters. However, with sophisticated satellite communications now available on a world-wide basis, programming sources could come from anywhere in the world, and so could telemetry to switch transmitter frequency, switch antennas and perform other necessary command and control functions. The only Alaskan investment would be the necessary antenna farm, transmission equipment, and engineering staff on location to maintain it.

During recent months I have devoloped additional views on utilizing Alaska as a site for important U.S. Government activities. It has been my experience that during periods of good standard broadcast band propagation, early in the morning (expecially during fall, winter and spring months when sundown conditions exist to the West, all kinds of foreign language signals can be heard, even on small transistor radios in the home. They appear to be Oriental in nature. A similar condition was noted in Nome during earlier years, because the Jesuit Fathers became disturbed that Alaskan Eskimo people could pick up Siberian broadcasts in English and there was little of any local broadcast programming to offset Soviet propaganda. This caused [redacted] to acquire funds STAT for a Nome radio station in 1965, at which time I helped him choose equipment and apply for a 10,000 watt Construction Permit which [redacted] STAT

Actually, your acquisition of Congressional funding for the Federal Communications Commission to begin Arctic Propagation studies in the Standard Broadcast Band has led me to a new concept. When I discussed Arctic propagation with FCC Engineering staff members, I noted that they had a more than casual interest in what might also be heard from the West. The Arctic sky-wave studies you funded were primarily designed to monitor South 48 Clear Channel stations for engineering data to create new Class 1-A sky-wave curves which would correct and replace the ancient 1934 FCC Engineering curves prepared for latitudes below the Canadian border. Subsently, at the time the contract with the University of Alaska/ Geophysical Institute was being negotiated with the FCC, I asked [redacted] if he could provide the FCC with a STAT "bonus" by orienting an antenna toward the West, and spend a little time monitoring what could be received from that direction. He agreed. He also reminded me that the Geophysical

Institute has been studying Arctic propagation, eruptions from the sun and other Polar phenomena for years, and has a wealth of material either in computers or stored in boxes from early studies before computers were available.

When I was in Washington last May, I learned from Engineering friends who are in a position to know, that the United States Government has found that monitoring foreign country standard broadcast band transmissions, which are designed for local listeners, affords important intelligence information because these "home" reports are related to existing realities, rather than propaganda released for foreigh consumption. I understand that U.S.A. monitoring of Iranian home-broadcasts during the hostage crisis was especially revealing.

Therefore it would seem to me that a site in Alaska might also be considered for the location of a listening post for standard broadcast band transmissions from Siberia, North Korea, China, and the Soviet Union for that matter. Inspecting a globe, you will note that from Alaska, many of these countries are South, or almost on a North-South axis, which affords optimum transmission conditions except for extreme fadeout conditions.

I feel confident that there is engineering merit for both of the above projects and to prove it there might well be an additional study called for by the University of Alaska/Geophysical Institute. In addition to the quantity of related data in their own computers, they have access to a great deal of additional information contained in computers of the Stanfor Research Institute. I'm confident the Geophysical Institute has the world's best supply of data vital to these topics.

One of the reasons I have been active during recent months supporting retention of the FCC Field Monitoring Station in Anchorage is because the functions of their operations might well be integrated into the Alaskan intelligence gathering potential referred to above.

Senator Ted, I believe there is much food for thought which might be of interest to the State Department, the DOD and the FCC - perhaps to other Government Foreign Service - contained in these observations.

Enclosed are copies of clippings accumulated during the past few years relating to the above, as well as other supporting information. If you would be interested in discussing this further while I am in Washington from September 25th to 30th I would be happy to do so.

Cordially,

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Enclosures

THE SECRETARY OF DEFENSE

WASHINGTON, THE DISTRICT OF COLUMBIA

NOV 20 1981

EAS 81-2137

The Honorable William J. Casey
Director
Central Intelligence Agency
Washington, D.C. 20505

Dear Bill:

We received the enclosed letter from Senator Ted Stevens with a proposal from [redacted] STAT for the establishment of an [redacted] STAT intelligence listening post in Alaska for standard civil broadcasts from the USSR.

I believe that your staff is in a better position to evaluate the proposal, which appears to have some merit. Therefore, I am forwarding a copy of the letter for your consideration and response to Senator Stevens.

Sincerely,

Enclosure

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April 23, 1981

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Dear

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Your recent mention of the possibility of locating VOA short wave radio stations in Alaska for the purpose of providing radio coverage of the Eastern bloc nations of Europe is most interesting. As a matter of fact, for personal reasons, I find the prospect not only exciting but also well grounded in technical justification.

As you know, one of my hobbies is Amateur Radio and I have found that reaching and communicating with the Communist nations of Europe is very easily accomplished from my location here in Fairbanks. I have many, many times talked with fellow amateurs in Poland, East Germany, Russia, Czechoslovakia and Rumania. It almost seems easier to contact stations in these countries than it is to contact stations in the contiguous states. I feel that the location of short wave stations in Alaska would be very advantageous from a propagational point of view as a result of my experiences on the amateur bands, particularly 20 meters. As you know one of the most used short wave broadcasting bands is 19 meters which, no doubt, would exhibit very similar propagation effects.

While your idea may, on the surface, might seem somewhat farsighted I can see a real benefit to the United States in its effort to inform the enslaved people of Europe through the natural advantage offered by the location of transmitters in Alaska. I would hope that others might realize the benefit of what you are proposing and I would offer whatever assistance I might be able to add to your efforts.

Best regards,

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